

**Information about the Environment and for travellers in Crete:****Cretan birthwort (*Aristolochia cretica*)**  
Probably already used as medicinal plant in the antique

The Cretan birthwort belongs in the family of the birthwort plants (Aristolochiaceae) to the kind *Aristolochia*, pipe vines (probably so called because of the pipe-like appearance of its blooms). Those approx. 480 kinds of the birthwort plants are divided in two subfamilies, which are, with exception of the arctic, common world-wide. It is a evergreen or leaves throwing woodiness climbers or perennial herbaceous plant. The alternate leaves are simple or cordiform, without stipules. In the leaf axils the blooms are usually formed individually; the perianth grew together to a tube. The blooms have a special pollination mechanism. They “smell” strongly, in order to attract certain insects.

The actual blooms of *A. cretica* are hidden in a u-shaped tube formed by connate high-leaves. This tube can become up to 18 cm long (measured in the elbow) and reminded from the form of a Saxophone. It forms an insect trap, into which decoyed by the musty smell, small insects in-creep into the boiler of the actual blooms. The long downwards directed, white hair, with which the inside of the tube is closely covered ensures that insects cannot immediately leave the bloom again, but remain trapped within the bloom, until the anther are matured and the animals are loaded with pollen. Then the hair wither, the animals leave the plant with their freight and pollinate the next. Because of this dusting mechanism this birthwort is also called “boiler trap flowers”.

The petiole of the Cretan birthwort is usually down-lying, but can in the bushes curl upwards up to 80 cm height; the deeply cordiform leaves reach a length of maximally 8 cm. Capsule fruits are formed. The plants bloom from March to May. Their Habitat enclosure fresh to damp, open to shady lime rock, try stone walls, and olive groves up to 1100 m height.





The generic name *Aristolochia* goes back to the Greek words *aristos* (very well, the best) and *lokeius* (belonging to bearing) and points on a use in the antique. Thus the Greek physician Dioscurides wrote in the 1<sup>st</sup> Century in his pharmacology: “The *Aristolochia* therefore carries its names because it is to help purperant women”. Also the Roman and Greek physicians of the antiquity recommended different *Aristolochia* kinds as medicine against snakebites.

Nowadays the birthwort is only used in homeopathic dilution, because it is not poisonous only, but the active substance Aristolochia acid is considered also as carcinogenic; see in addition the section about the ingredients at annotations.

#### Annotations:

The Cretan birthwort is particularly common within the “Valley of Dead” (Nekron Canyon, South-East Crete); therefore see our leaflet No. 002-04/E at: [ [http://www.kreta-umweltforum.de/Merkblaetter\\_en/002-04E.pdf](http://www.kreta-umweltforum.de/Merkblaetter_en/002-04E.pdf) ].

Ingredients: The roots of the birthwort contain up to one percent volatile, water-soluble, poisonous Aristolochia acids, which is considered as kidney-damaging and carcinogenic.

In the traditions the birthwort is often also a component of the wreath at the herbal consecration, which is celebrated at Maria Ascension Day.



A butterfly, endemic on Crete, the Cretan birthwort moth (*Zerynthia cretica*). See fig. 1, 2 [in the older Greek Literature also as *Allancastria cretica* (see fig. 3)] It develops as a caterpillar (see fig. 4) nearly without exception at the Cretan birthwort (forage plant)

This leaflet has been arranged by *Ute Kluge*, *Heinz Eikamp* and *Ralf Schwab*

© Pictures: all pictures of the plants [and butterfly picture 2] *Ralf Schwab*, Obertshausen; taken in the “Valley of Death” (Nekron Canyon), Crete 25<sup>th</sup> of March 2008.